

Abstract

Dental caries in man may be prevented or treated by oral ingestion of human or humanized mouse monoclonal IgG and IgM antibodies that bind to surface antigens of cariogenic organisms, such as *S. mutans*. The genetically engineered monoclonal antibodies engage the effector apparatus of the human immune system when they bind to cariogenic organisms, resulting in their destruction. In a preferred embodiment, monoclonal antibodies to cariogenic organisms are produced by edible plants, including fruits and vegetables, transformed by DNA sequences that code on expression for the desired antibodies. The antibodies are applied by eating the plants.